

EXPLANATION OF PLATE.

Cepegilletta betulaefoliae, n. sp.

Alate viviparous female:

1, antenna; 9, cauda and anal plate; 10, cornicle; 13, head.

Apterous viviparous female:

2, antenna; 8, cauda and anal plate; 11, cornicle.

Oviparous female:

3, antenna; 7, cauda and anal plate; 12, cornicle; 6, hind tibia.

Cepegilletta myricae (Patch).

Alate viviparous female:

4, antenna; 14, cornicle; 17, cauda and anal plate.

Apterous viviparous female:

5, antenna; 15, cornicle; 16, cauda and anal plate.

Calaphis betulaecolens (Fitch).

18, cauda and anal plate of alate viviparous female.

NOTE.—Drawings on this plate are made to the following scales.—

1, All antennae, head and tibia are drawn to the same scale.

2, All drawings of caudae, anal plates and cornicles are made to the same scale.

All measurements of relative lengths of antennae can be transferred into millimeters by using the following scale: 1.0 = 0.016 mm.

NOTES ON THE BETHYLINAE WITH DESCRIPTIONS OF
ONE NEW CUBAN AND TWELVE NEW NORTH
AMERICAN SPECIES (HYM.).

BY ROBERT FOUTS.

This study is based principally on material preserved in the collection of the United States National Museum. Several species are described from specimens in my own collection and one, *Bethylus amoenus*, is based on material sent to me by Dr. J. C. Bradley of Cornell University.

In preparing the keys to *Pseudisobrachium* and to *Goniozuz* all of Ashmead's type material was carefully studied and more recently collected specimens compared with it. Kieffer's species are placed according to the information given in his descriptions and in his own keys.

Genus **PSEUDISOBRACHIUM** Kieffer.

Key to the North American Species.

- | | |
|---|------------------------------|
| 1. Females..... | 2 |
| Males..... | 7 |
| 2. Abdomen shorter than the thorax..... | <i>myrmecophilum</i> Ashmead |
| Abdomen longer than the thorax..... | 3 |
| 3. Abdomen about one and two-thirds times as long as the thorax; head one and one-fourth times as long as wide (from anterior margin of clypeus | |

- to posterior margin of head).....*montanum* Ashmead
 Abdomen at the most one and two-fifths times as long as the thorax.....4
4. Pronotum smooth, alutaceous, with several small indistinct punctures
 laterally.....*paucipunctata* Fouts
 Pronotum with quite a number of fairly large, distinct punctures.....5
5. Thorax mostly yellow or yellowish-brown; coxae bright yellow.....
flavicoxis Fouts
 Thorax dark brown; coxae not bright yellow..... 6
6. Abdomen one and one-fifth times as long as the thorax; head one and
 one-eighth times as long as wide.....*mandibulare* Ashmead
 Abdomen one and one-tenth times as long as the thorax; head one and
 one-sixth times as long as wide.....*rufiventre* Ashmead
7. Frons finely alutaceous, the punctures very distinct; wings whitish, sub-
 opaque.....*montanum* Ashmead
 Frons more strongly alutaceous, the punctures, in places at least, obscured
 by the sculpture; wings not whitish..... 8
8. Ocelli very large and prominent.....*flavinervis* Fouts
 Ocelli normal, not prominent.....9
9. Mesopleurum coriaceous and punctate.....12
 Mesopleurum delicately reticulate with a few punctures.....10
10. Species robust; wings rather deep brownish; punctures on mesonotum,
 especially on sides, numerous and clearly defined.....*puncticeps* Fouts
 More slender; wings lighter in color, not hyaline but not strongly tinged
 with brown; punctures on mesonotum sparse and not clearly defined.....11
11. Abdomen, except part of first segment, dark brown.....*mandibulare* Ashmead
 Abdomen yellowish in large part, the apical edges of all segments yellow-
 ish.....*rufiventre* Ashmead
12. Antennae and legs dark brown, not tinged with rufous.....*rugosulum* Fouts
 Antennae and legs not dark brown, reddish in part at least.....
myrmecophilum Ashmead

***Pseudisobrachium flavicoxis*, new species.**

Female.—Length, 3.94 mm. Head about one and one-ninth times as long as wide, about one and one-fourth times as wide as the thorax across middle, punctate as in all the North American species; pronotum, mesonotum laterally, mesopleura above anteriorly, and propodeum laterally, with scattered fairly large punctures; thorax across the middle about one and one-fifth times as wide as the pronotum, not quite one and one-half times as wide as the propodeum; head brown; antennae brown; thorax yellowish-brown, the pronotum and the propodeum yellow; first segment of abdomen, second, fifth and sixth basally, and last segment entirely, yellow; venter of abdomen brownish, becoming yellowish toward apex; legs brownish, the coxae bright yellow.

Type locality.—Baldwin, Kansas. (Coll. Fouts.)
 Described from one specimen.

***Pseudisobrachium paucipunctata*, new species.**

Female.—Length, 3.20 mm. Head 1.27 times as long as wide, about one and one-fifth times as wide as the thorax (across middle), sculptured as in

flavicoxis; dorsum of thorax alutaceous, without punctures except for several small ones on the pronotum; head and thorax dark brown; scape brown; flagellum light reddish-brown; abdomen colored as in *flavicoxis*; legs yellowish, the posterior pair brighter in color.

Type locality.—Salt Lake, Utah. (Coll. Fouts.)
Described from one specimen.

***Pseudisobrachium flavinervis*, new species.**

Male.—Length, 4.58 mm. Head as wide as the thorax, a little longer than wide; frons and vertex strongly alutaceous, with scattered punctures, the former more delicately sculptured medially; cheeks finely alutaceous with a few punctures; occiput finely aciculate; eyes a little more than one and one-half times as long as head behind them; ocelli very large, circular, protuberant; interocellar line twice as long as the lateral ocellar, as long as the ocellular line; pronotum and mesonotum finely alutaceous, the former with a few small scattered punctures, the latter with the punctures a little larger and much more numerous, especially laterally; scutellum with a few small punctures; propodeum typical of the genus, not margined posteriorly, with a strong median carina nearly to the apex of the superior face; anterior half of propodeum strongly alutaceous, with a few indistinct and interrupted transverse carinae; behind this the propodeum is finely alutaceous, without striae or carinae; mesopleurum finely alutaceous above and behind, more strongly so and with scattered punctures below and in front; venation typical (see figure in Das Tier., Lief. 41, 1916, p. 472) except that the discoideus is not present, not even as a faint line; black; antennae and mandibles rufous; legs yellowish-brown; abdomen dark brown, reddish-yellow at margins of first tergite and ventrally and laterally toward base and apex; venation yellowish except the subcosta toward the apex which is brown.

Type locality.—Lone Star, California. (IX-21-1927.)

Type.—Cat. No. 41217, U. S. Nat. Mus. Paratype in Coll. Fouts.

Described from three specimens. The data accompanying them is as follows: "Insects taken from soil containing an infestation of grown larvae and pupae of the Dried Fruit Beetle."

***Pseudisobrachium puncticeps*, new species.**

Male.—Length, 4.32 mm. Head one and one-eighth times as wide as long, as long as the thorax is wide; frons and vertex strongly alutaceous, the punctures numerous, and, though rather shallow, very distinct; interocellar line scarcely longer than the lateral ocellar; ocellular line twice as long as the interocellar; eyes one and one-third times as long as head behind them; pronotum and mesonotum alutaceous, more finely sculptured than the frons, the former with scattered shallow punctures, the latter with the punctures deeper and more numerous, especially laterally; scutellum polished, with a few punctures laterally; propodeum reticulate and with a median carina on anterior half, transversely aciculate on posterior half; mesopleurum very

delicately alutaceous, shining, with a few punctures along anterior margin; discoideus indicated by a brown line; thorax two and one-eighth times as long as wide; black; pronotum reddish in part; abdomen yellowish on margins of the first and second tergites and on most of venter; antennae and legs reddish-brown, the former darker distally; wings brownish.

Type locality.—Glen Echo, Maryland. (VIII-19-1916.)
One specimen collected at light by the author.

***Pseudisobrachium rugosulum*, new species.**

Male.—Length, 4.37 mm. Head as wide as long, as wide as the thorax, sculptured as in *puncticeps*; interocellar line about as long as the lateral ocellar, less than a third as long as the ocellular; head behind the eyes a little longer than the eyes; pronotum alutaceous, sparsely punctate, slightly wrinkled anteriorly; mesonotum likewise alutaceous and punctate but the punctures larger and much more numerous, especially anteriorly and laterally; scutellum shining, faintly alutaceous, with a few punctures along its margin; mesopleurum strongly alutaceous, polished above medially and with numerous large punctures anteriorly; propodeum as in *puncticeps* except that the posterior face is transversely wrinkled; thorax not quite two and one-half times as long as wide; venation as in *puncticeps*; black; scape very dark brown; flagellum fuscous; legs rather dark brownish; wings tinged with brown.

Type locality.—Mount Holly Springs, Pennsylvania. (VIII-12-1920.)

One specimen swept from wheat stubble by the author.

***Pseudisobrachium myrmecophilum* Ashmead.**

I have in my collection seven male specimens from Glen Echo, Maryland. They were captured on August 7, 1921, and September 17, 1924.

Genus **HOLEPYRIS** Kieffer.

***Holepyris floridanum* (Ashmead).**

Isobrachium (?) *floridanum*, Ashmead, Ent. Amer., Vol. 3, 1887, p. 76, male.—

Ashmead, Bull. 45, U. S. Nat. Mus., 1893, p. 39, male.

Pseudisobrachium floridanum (Ashmead) Kieffer, Gen. Ins., fasc. 76, p. 24.—

Kieffer, Das Tier., Lief. 41, 1914, p. 478, male.

The type has been examined and found to be a female. The following brief description may help to identify the species: Head seen from in front about one and one-fourth times as long as wide, widest half way between the eyes and the posterior margin; frons convex, uniformly shagreened and with numerous minute punctures; head behind eyes somewhat longer than the greatest length of the eyes; pronotum and mesonotum sculptured like the frons; pronotum subconvex, about one and two-fifths times as wide as long; notauli briefly indicated anteriorly; propodeum subconvex dorsally, margined laterally

and posteriorly, with five longitudinal carinae; the median carina extends to the ridge separating the superior from the inferior face; the outer carinae are abbreviated posteriorly, about three-fourths as long as the median one; the other two carinae are slightly shorter than the others just mentioned; the whole upper surface of the propodeum is strongly transversely striate; between the longitudinal carinae the striae are somewhat irregular and indistinct; inferior face of propodeum without distinct sculpture; wings normally developed; stigma linear, dark brown apically, white medially, and light brown to the junction of the subcostal and basal veins; radius long and curved, originating near the apex of the stigma.

Redescribed from the type, Cat. No. 14048, U. S. National Museum.

This species differs from *subapterus* Melander & Brues in having the wings normally developed. From *punctifrons* Fouts, to which it is very closely related, it differs in having the eyes smaller and the punctures on the frons, pronotum, and mesonotum smaller and much more numerous.

***Holepyris marylandicus*, new species.**

Female.—Length, 3.00 mm. Differs from *subapterus* Melander and Brues in having the eyes about seven-ninths as long as the head behind them, and in having the mesonotum but one-third the length of the pronotum. Head evenly convex above, uniformly finely alutaceous and rather closely covered with small punctures; head 1.36 times as long as wide, 1.25 times as wide as the thorax; pronotum subconvex, about as wide as long, sculptured like the head; mesonotum delicately alutaceous, impunctate; scutellum similarly sculptured but with a few small punctures, with a transverse groove at base; propodeum with three longitudinal carinae, the lateral ones extending a little past the middle of the sclerite; transverse striae very small, wavy, and indistinct; inferior face of the propodeum alutaceous, without a carina; wings just attaining the apex of the superior face of the propodeum, brownish; abdomen 1.10 times as long as the thorax; black; antennae and legs reddish-brown, the tarsi a little lighter.

Variations.—Length, 3.60 mm.; last abdominal segment and part of the preceding one yellowish.

Type locality.—Glen Echo, Maryland.

Two specimens collected by the author May 18, 1926.

Paratype in Coll. U. S. National Museum, Cat. No. 41218.

Genus **ANISEPYRIS** Kieffer.

***Anisepyris cubensis*, new species.**

Female.—Length, 6.00 mm. Head slightly wider than long, about as wide as the thorax; frons deeply and rather thickly punctate, with a groove anteriorly extending as far posteriorly as the base of the eye; malar space extremely short, not more than one-eighth or one-ninth as long as the eyes; head behind the eyes about as long as the eyes; scape flattened, sharply curved before the middle, a little longer than the four following joints together; flagellar joints a little

longer than wide; mandibles widened apically, with five teeth; thorax about one and four-fifths times as long as wide; pronotum and mesonotum sculptured like the frons but faintly alutaceous and the punctures are not so numerous; pronotum a little over twice as long as the mesonotum, margined anteriorly and laterally, the lateral margins not strongly marked; scutellum faintly alutaceous, with a few punctures except medially; propodeum transverse, with five longitudinal ridges, the median one extending to the petiole; the ridges next to the median one extend five-sixths the length of the anterior face; the other two extend from the base one-third the length of the anterior face; area between ridges transversely wrinkled; rest of anterior face alutaceous, slightly wrinkled anteriorly; stigma about twice as long as wide, the sides parallel; discoideus and brachius represented by white lines; nervulus curved at middle; head and thorax (except propodeum) brilliant metallic green; propodeum metallic blue; clypeus black; mandibles and antennae reddish-brown; anterior coxae dark brown; abdomen black, the last three segments rufous; anterior wings dark brown, slightly paler at apices; posterior wings hyaline.

Type locality.—Nagua, Oriente, Cuba. (July 7, 1922.)

Paratype localities.—Pico Turquino, Cuba. (July 22, 1922.)
Sierra Maestra, Cuba, 3000–3500 ft. (July 10–20, 1922.)

Seven females collected by S. C. Bruner and C. H. Ballou.

Type.—Cat. No. 41219, U. S. National Museum. Three paratypes in Coll. Fouts.

Anisepyrus pulchellus, new species.

Female.—Length, 4.61 mm. Runs to *fasciipennis* Kieffer in Kieffer's key (Das Tier., Lief. 41, 1914, p. 435) and differs in having the legs rufous and in having fine sparse punctures on the pronotum. Head as wide as long, a little wider than the thorax; frons and vertex alutaceous, evenly and fairly thickly covered with moderate-sized punctures; interocellar line a little longer than the lateral ocellar, less than half as long as the ocellular; eyes two and one-fourth times as long as the head behind them; frons and dorsum of thorax, except propodeum, covered with fairly long, erect, reddish-colored hairs; pronotum, mesonotum, and scutellum alutaceous, with fine scattered punctures; mesopleurum with three sunken areas, anterior, superior, and posterior, separated from each other by flat raised ridges; these sunken areas alutaceous, not punctate; propodeum transversely striate, with seven longitudinal ridges; the median ridge and the second from the outside attain the apex of the anterior face; these latter ridges are curved outwardly and inwardly on apical half; the other ridges extend to the apical one-third of the segment; posterior face of propodeum transversely striate, more strongly so below, with a median longitudinal ridge; black; head and thorax faintly coppery in color; antennae rufous, darker above beyond the fifth joint; legs rufous, the posterior femora a little darker; tegulae rufous; wings brownish, the veins uniformly dark brown.

Type locality.—Glen Echo, Maryland. (VIII-1-1921.)

One specimen collected by the author.

This species is typical of the genus in every respect.

Genus **BETHYLUS** Latreille.

Bethylus amoenus, new species.

Female.—Length, 3.53 mm. Head, 1.30 times as long as wide, 1.57 times as wide as the thorax; frons scaly reticulate, with sparse, scattered, fairly large punctures; ocelli rather small, close together, arranged in a right angled triangle; head behind the eyes 1.23 times as long as the eyes; antennae filiform, all the flagellar joints a little longer than wide; thorax about two and seven-tenths times as long as wide, sloping forward and backward from the anterior margin of the mesonotum; pronotum and scutellum finely reticulate, with a few scattered punctures; mesonotum scaly reticulate like the frons, roughened slightly posteriorly and laterally but without distinct punctures; notauli and lateral grooves on mesonotum absent; propodeum fairly long, very finely reticulate, seen laterally its upper surface evenly arcuate, the anterior face not distinguished from the posterior face; all pleurae like the propodeum finely reticulate; wings vestigial, extending about to the basal one-seventh of the propodeum; abdomen about one and three-fifths times as long as the thorax; black; abdomen very dark brown, lighter brown anteriorly and below except in middle; antennae brown; legs dark brown; anterior tibiae and all tarsi yellowish-brown.

Male.—Similar to the female except in secondary sexual characters. Head 1.19 times as long as wide, not quite one and one-half times as wide as the thorax; head behind eyes one and one-fifth times as long as eyes; antennae more attenuate than in the female, the flagellar joints nearly twice as long as wide; thorax three times as long as wide; wings as in the female; abdomen 1.56 times as long as the thorax; color as in the female except that antennae are lighter brown and the mandibles are yellowish, the teeth reddish.

Type locality.—Slaterville-Caroline, New York. (June 14, 1904.)

Type.—In Cornell University.

One female and one male submitted to me for identification by Dr. J. C. Bradley of Cornell University.

Genus **GONIOZUS** Forster.

Key to the North American Species.

1. Keel on clypeus rounded or flattened; no keel on frons above clypeus
or if there is one it is flattened.....2
Keel on clypeus and on frons above clypeus sharp and distinct.....4
2. Radius not curved upward at tip; frons extremely delicately alutaceous,
with a few, not more than nine or ten, scattered punctures.....
politus Ashmead.
Radius curved upward at tip; frons more strongly alutaceous, with more
punctures.....3
3. Mandibles very thick and strong, about as wide as the clypeus is long...
megacephalus Ashmead.
Mandibles not so thick, narrower than the clypeus is long.....
brevinervis Fouts

4. Propodeum margined posteriorly..... 5
 Propodeum not margined posteriorly..... 6
5. Legs yellow to light yellowish-brown..... *hubbaridi* Howard
 Coxae and femora black to dark brown..... *platynotae* Ashmead
6. Legs light yellowish-brown..... *flavipes* Fouts
 Legs mostly darker..... 7
7. Branch of basal vein about as long as the upper abscissa of the basal vein 8
 Branch of basal vein very short, not as long as the upper abscissa of the
 basal vein..... 9
8. Head about one and one-fifth times as long as wide; eyes about one and
 one-fourth times as long as the head behind them; antennae reddish-
 brown, the scape and terminal four or five joints darker; all antennal
 joints distinctly longer than wide..... *longinervis* Fouts
 Head one and one-half times as long as wide; eyes somewhat shorter than
 the head behind them; antennae red; pedicel as wide as long; third and
 fourth joints thin, wider than long; tarsi red..... *clarimontis* Kieffer
9. Head in female about one and one-half times as long as wide; head be-
 hind eyes a little longer than the eyes; head in male a little less than
 one and three-tenths times as long as wide; eyes about one and one-
 tenth times as long as the head behind them..... 10
 Head in female about one and one-fifth times as long as wide; eyes a
 little longer than the head behind them; head in male slightly more than
 one and one-sixth times as long as wide; eyes about one and one-third
 times as long as the head behind them..... *columbianus* Ashmead
10. Keel on clypeus reaching about opposite the middle of the eyes; pron-
 otum about one and one-third times as long as the mesonotum.....
occipitalis Kieffer
 Keel on clypeus reaching a little past the lower margins of the eyes; pro-
 notum about one and one-half times as long as the mesonotum.....
electus Fouts

Goniozus brevinervis, new species.

Female.—Length, 2.88 mm. Head about one and one-sixth times as long as wide, as wide as the thorax, the sides straight for a short distance behind the eyes; eyes a little longer than head behind them; frons smooth, alutaceous, with scattered punctures, the latter not very numerous, about one to every square half millimeter; antennae filiform, the flagellum narrowing slightly basally and apically; pedicel and third joint subequal in length, the former somewhat thicker; following seven joints a little longer and wider than the third, narrowing and shortening gradually distally; eleventh and twelfth joints about as long and as wide as the third; last joint slightly longer, acute at tip; all antennal joints longer than wide; none of them, however, more than one and one-third times as long as wide; pronotum, mesonotum, and scutellum alutaceous and punctate like the head; mesonotum with a row of punctures across it near the apex, this row (of about seven or eight punctures) curving upward on the sides; otherwise the mesonotum is impunctate; pronotum more or less distinctly transversely depressed across the posterior third; scutellum

feebly convex, with several punctures laterally; radius curved upward at apex; black; scape dark brown; flagellum light brownish on proximal half, darker distally; anterior tibiae and all tarsi yellowish-brown; middle tibiae dark brown basally, lighter apically; posterior tibiae brown on basal half, light brown on apical half; wings, veins light brown, the costa, pro- and parastigma dark brown.

Male.—Length, 2.13 mm. Similar to the female. Head about one and one-fourth times as long as wide, as wide as the thorax; frons alutaceous, with several widely scattered punctures laterally; flagellum moniliform, the joints subequal, a little longer than wide; pronotum and mesonotum as in the female but with the punctures smaller and fewer; no depression on the pronotum; scutellum alutaceous, with one small puncture on each side; color as in the female.

Type locality.—Wooster, Ohio.

Type.—Cat. No. 41220, U. S. National Museum. Five paratypes in Coll. Fouts.

Host.—*Coleophora* sp.

Eight females and three males reared by J. S. Houser from case-bearing insect larvae found on the side of a barn.

Goniozus hubbardi Howard.

Goniozus hubbardi Howard, Kieffer, Das. Tier., Lief. 41, 1914, p. 529.

Dr. Howard's type from Crescent City, Fla., has not been located in the National Collection. Ashmead had assigned a type number but did not label the specimen.

The National Collection contains a series of five females labelled "Perrine, Fla., C. F. Moznette, Coll., June 1, 1923, Ex. larva on Avocado." The identification was made by Mr. S. A. Rohwer.

Goniozus platynotae Ashm.

Goniozus platynotae Ashm. Kieffer, Das Tier., Lief. 41, 1914, p. 528.

Goniozus euliae Fouts, Proc. Ent. Soc. Wash., Vol. 28, 1926, p. 167.

This species occurs in the District of Columbia, in Virginia, Maryland, Florida, Mississippi, Tennessee, Pennsylvania, Arizona and Arkansas.

The following records are new for the species: Maryland: Glen Echo, June 29, 1917, one female, Coll. Fouts; Cabin John, summer, 1917, two females, Coll. Fouts; Cabin John, July 24, one female reared from *Cacaecia rosaceana* Harris. Washington, D. C.: August 5, 1920, Chittenden No. 6810, three females and one male reared from *Archips* sp. on blackberry; August 2, 1920, Chittenden No. 6875, two females reared from ? *Coelostathma discopunctata* Clemens; August 20, 1920, Chittenden No. 6245, one female reared by M. T. Van

Horn from a Pyralid larva on blackberry. Mississippi: Utica, one female. Tennessee: Nashville, 3/27, one female collected by C. C. Hill; Nashville, Webster No. 11331, three females reared by W. H. Larrimer from *Sparganothis sulfureana* Clemens. Pennsylvania: Carlisle, July 16, 1920, one female collected on flower of wild carrot. Illinois: Olney, July 22, 1905, small series of females reared from *Archips* sp., submitted to me for identification by Dr. T. H. Frison and all but two of them returned to him. Arkansas: Bentonville, July 21, 1918, Quaintance No. 1639, two males reared from *Canarsia* by D. Isely. Virginia: Winchester, July 28, 1926, one female reared by W. S. Hough from a larva of the Red-banded Leaf Roller, *Eulia velutinana* Walker. Arizona: Tempe, Webster No. 7205B, three females reared by R. M. Wilson from *Platynota flavedana* Clemens.

The National Collection contains the following specimens included in the type series (Cat. No. 2193): one female (type) and one male (allotype) labelled: Par. on *Platynota idaeusalis* Walker (these two specimens were, presumably, collected in the District of Columbia by Dr. C. V. Riley); one female labelled: Va., Aug. 31/89; one female labelled: M. E. Murtfeldt, Aug. 5/86; one female from Cedar Point, Md.; and one female from Jacksonville, Fla. All these specimens have been carefully compared with one another and are apparently conspecific. Of the allotype only the abdomen remains, the rest of the specimen having been lost.

Goniozus flavipes, new species.

Female.—Length, 2.54 mm. Head about one and one-seventh times as long as wide, slightly wider than the thorax; eyes about one and one-seventh times as long as the head behind them; frons sculptured as in *platynota*, the punctures fairly numerous; clypeus with a sharp keel, the keel short and somewhat rounded above the clypeus on the frons; scape thick, curved, about twice as wide as the pedicel, somewhat shorter than the three following joints together; pedicel about one and one-half times as long as wide, a little shorter than the two following joints together; flagellar joints about as wide as long; dorsum of thorax alutaceous like the frons, with a few scattered punctures; propodeum alutaceous and finely transversely wrinkled, the anterior face with a broad median longitudinal area which is polished, entirely without sculpture; wings hyaline, the veins yellowish-brown, the pro- and pterostigma dark brown; basal vein interrupted above the center by a short branch which is shorter than its upper abscissa; radius curved upward at its apex, distant from the apex of the wing by about its own length; dark reddish brown; legs and antennae light yellowish-brown; mandibles brownish.

Male.—Length, 1.62 mm. (terminal abdominal segments retracted). Proportions of head about as in the female. Frons more delicately alutaceous than in the female, the punctures few and widely scattered; pedicel about as

long as joints three and four together; flagellar joints about as wide as long. Color as in the female.

Type locality.—Junction City, Kansas.

Two specimens collected, August 10, 1927, by the author.

***Goniozus longinervis*, new species.**

Female.—Length, 2.70 mm. Very closely related to *clarimontis* Kieffer. The notes given in the preceding key will serve to distinguish the species. Frons alutaceous, punctate, about five or six punctures to the square one-tenth millimeter; pronotum, mesonotum and scutellum similarly sculptured, but the punctures less numerous; branch of basal vein nearly straight, about as long as the upper abscissa of the basal vein; radius curved upward at apex, distant by about its own length from the apex of the wing; mandibles black, venation brown, the pro- and pterostigma darker.

Male.—Length, 2.15 mm. Similar to the female. Head about one and one-fifth times as long as wide; eyes about one and two-fifths times as long as the head behind them; head and thorax as in the female but a little more delicately sculptured; scape thickened, about as long as the two following joints together; all flagellar joints a little longer than wide; color as in the female except that only the pedicel and the following three or four flagellar joints are yellowish-brown.

Type locality.—Halsey, Nebraska.

Type.—Cat. No. 41221, U. S. N. M.

Host.—*Rhyacionia frustrana bushnelli* Busck.

Three females and one male labelled as follows: Hopk. U. S. 17508, on *Pinus ponderosa*, and *Pinus divaricata*, emerged July 3-5, 1925. L. G. Baumhofer, Coll.

***Goniozus columbianus*, Ashm.**

Goniozus columbianus Ashm. Kieffer, Das Tier., Lief. 41, 1914, p. 530.

Goniozus foveolatus Ashm. Kieffer, *ibid.*, p. 531.

Goniozus hortorum Brues, Kieffer, *ibid.*, p. 528.

I have selected as type of *foveolatus* a female specimen from Jacksonville, Fla., labelled *Goniozus foveolatus* Ashm., in Ashmead's handwriting, and type No. 2172, U. S. N. M. The male specimen from Georgiana, Fla. (see Ashmead in Monogr. Proct., p. 75), belongs to a species as yet undescribed. No specimens from the District of Columbia were found in the type series.

Two specimens of *hortorum* Brues are in the National Museum labelled "TYPE" and "Type No. 26528, U. S. N. M." They are both mounted on tags on the same pin and are, contrary to Professor Brues' statement in his original description, both males.

The species occurs in the District of Columbia, in Virginia, New York, and Pennsylvania.

The following records are new for the species: Virginia: Roslyn, bred from *Cercis*, one female; Bousack, Sept. 1, 1927, Ex. (*Laspeyresia*) *Grapholitha molesta*, one male; Arlington, Oct. 23, 1916, five females reared by August Busck from the larvae of *Laspeyresia*, Quaintance No. 7785. Washington, D. C., one female collected by the author. New York: Quoque, Long Island, Quaintance No. 6276, three females and three males. Pennsylvania: North East, parasite of the Grape Berry Moth, *Polychrosis vitiana* Clem., Quaintance Nos. 10916, 11077, 11099, 14428, 14469, fifteen females and five males reared by R. A. Cushman in 1916; Waynesboro, Aug. 24, 1923, one female bred from the Apple Leaf Sewer, (*Ancylys*) *Anchylopera nubeculana* Clemens, J. R. Stear Coll.

Goniozus electus, new species

Female.—Length, 2.30 mm. Differs from Kieffer's description of *occipitalis* as follows: keel on clypeus shorter, not reaching to the middle of the eyes; scape and terminal seven antennal joints brown; joints two to seven yellow; pronotum about one and one-half times as long as the mesonotum.

Male.—Length, 2.10 mm. Head and dorsum of thorax alutaceous as in the female, the punctures on frons not quite so numerous; scape thickened, curved, twice as wide as the flagellar joints, about as long as the two following joints together; pedicel somewhat wider than the third joint, about one and one-third times as long as wide, about as long as the two following joints together; third joint a little longer than wide; joints four to seven a little wider than long; terminal joints slightly longer than wide; colored like the female.

Type locality.—Bogalusa, Louisiana.

Type.—Cat. No. 41222, U. S. N. M. Two paratypes in Coll. Fouts.

Host.—*Rhyacionia frustrana* Comstock.

Description based on one female (type) and four males collected in April, 1925, by R. A. St. George.

Goniozus longiceps, Kieffer.

Goniozus longiceps Kieffer. Kieffer, Das Tier., Lief. 41, 1914, p. 530.

I have not included this species in the preceding key because Kieffer neglected to indicate the comparative length of the branch of the basal vein. The species runs to couplet 9 and differs from *longinervis* and *columbianus* in having the head one and one-half times as long as wide. From *clarimontis* it differs in the color of the legs. It differs from *occipitalis* in having the keel of the clypeus not extending past the bases of the antennae; and, finally, it differs from *electus* in having the pronotum distinctly shorter than the mesonotum and scutellum together.